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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/703,718 | 11/02/2000 | Takeshi Kusudou | 199178USO | 2139 |

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OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC
FOURTH FLOOR
1755 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VA 22202

EXAMINER

DERRINGTON, JAMES H

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1731

7

DATE MAILED: 06/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,718

Applicant(s)

KUSUDOU ET AL.

Examiner

James Derrington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4,5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2 and 6-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of copending Application No. 09/452,189. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims recite the polymer claimed in the copending application. The future intended use "ceramic-molding binder" or "compression-molding binder for ceramics" does not provide a patentable distinction.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 3-5 and 8-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of copending Application No. 09/452,189 in view of Watanabe et al (5,712,334) taken with Tanaka et al (4,492,783) or the Abstract of JP405163062A. The instant claims differ in that ceramic compositions and methods are recited. Watanabe et al disclose a related lactone modified PVA that includes ethylene as a comonomer (Col. 20, lines 63-64). Watanabe et al disclose that this modified PVA has utility as a binder for ceramics.

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The instant amounts of ceramic (claims 3,8), ferrite (claims 4,9) drying aqueous kneaded ceramic molding compositions with formation of granules, molding and sintering (claims 5,10) are notoriously well known expedients in the ceramic arts. As evidence of these known features, Tanaka et al is cited (See Col. 8, and Col. 1, line 53). Similarly, JP405163062A disclose these prior art steps. There is motivation for one of ordinary skill in the art to have used the binder of copending Application No. 09/452,189 in the claimed manner particularly since Watanabe et al disclose that lactone-modified PVA has superior properties to prior art PVA (See Col. 1, lines 26-64).

This is a provisional obviousness-type double patenting rejection.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 6-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ikeda et al (5,349,023).

Ikeda et al disclose a vinyl alcohol copolymer having a terminal amino group and comprising 1 to 90 mole% of vinyl alcohol units, 0 to 89 mole% of vinyl ester units and 10 to 90 mol% of ethylenically unsaturated comonomers such as ethylene and monomers capable of

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generating carboxyl groups and lactone rings in an amount of up to 10 mole% and wherein said vinyl alcohol copolymer has a saponification degree of at least 50 mol% and preferably at least 99 mol% and is obtained, basically, via copolymerizing a vinyl ester and at least one comonomer followed by solvolysis of the copolymer in methanol with an alkaline catalyst such as sodium hydroxide. (See the Abstract, the par bridging Cols. 1-2, Col. 2, lines 14-22, Cols. 3-6, especially, Col. 5, lines 46-60 and the examples).

It is submitted the claimed polymerization degree, saponification degree, carboxyl group content and lactone rings fall within the teachings of Ikeda et al. The future intended use "ceramic-molding binder" or "compression-molding binder for ceramics" does not provide a patentable distinction.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al (5,349,023) in view of Watanabe et al (5,712,334) taken with Tanaka et al (4,492,783) or the Abstract of JP405163062A.

The disclosure of Ikeda et al has been discussed above. The instant claims recite "binder" and/or ceramic compositions and methods. Watanabe et al disclose a related lactone modified PVA that includes ethylene as a comonomer (Col. 20, lines 63-64). Watanabe et al disclose that this modified PVA has utility as a binder for ceramics. The instant amounts of ceramic (claims 3,8), ferrite (claims 4,9) drying aqueous kneaded ceramic molding compositions with formation of granules, molding and sintering (claims 5,10) are notoriously well known expedients in the ceramic arts. As evidence of these known features, Tanaka et al is cited (See Col. 8, and Col. 1, line 53). Similarly, JP405163062A discloses these prior art steps. There is motivation for one of ordinary skill in the art to have used the binder of Ikeda et al in the claimed

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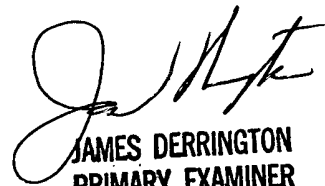
manner particularly since Watanabe et al disclose that lactone-modified PVA has superior properties to prior art PVA (See Col. 1, lines 26-64). Ikeda et al also recognize superior properties (See Col. 10).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Derrington whose telephone number is 703 308-3832. The examiner can normally be reached on 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-7718 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0661.

jd
June 10, 2002


JAMES DERRINGTON
PRIMARY EXAMINER
ART UNIT 137-1731